

Tian Cui

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

368
papers

7,438
citations

38
h-index

71
g-index

396
ext. papers

8,907
ext. citations

4.4
avg, IF

5.8
L-index

#	Paper	IF	Citations
368	Design Principles for High-Temperature Superconductors with a Hydrogen-Based Alloy Backbone at Moderate Pressure.. <i>Physical Review Letters</i> , 2022 , 128, 047001	7.4	8
367	Pressure-Induced Local Excitation Promotion: New Route toward High-Efficiency Aggregate Emission Based on Multimer Excited State Modulation.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 13, 1290-1299	6.4	1
366	Formation of twelve-fold iodine coordination at high pressure.. <i>Nature Communications</i> , 2022 , 13, 412	17.4	4
365	Reply to the Comment on "High-temperature superconductivity in transition metallic hydrides MH (M = Mo, W, Nb, and Ta) under high pressure" by X. Zheng and J. Zheng, , 2022, , DOI: 10.1039/D1CP01474A.. <i>Physical Chemistry Chemical Physics</i> , 2022 , 24, 1898-1899	3.6	
364	High-pressure bandgap engineering and amorphization in TiNb ₂ O ₇ single crystals. <i>CrystEngComm</i> , 2022 , 24, 2660-2666	3.3	0
363	Sr-Doped Superionic Hydrogen Glass: Synthesis and Properties of SrH.. <i>Advanced Materials</i> , 2022 , e2200924	9.4	2
362	Insight the effect of rigid boron chain substructure on mechanical, magnetic and electrical properties of FeB. <i>Journal of Alloys and Compounds</i> , 2021 , 896, 162767	5.7	2
361	High T _c Superconductivity in Heavy Rare Earth Hydrides. <i>Chinese Physics Letters</i> , 2021 , 38, 107401	1.8	2
360	Proposed Superconducting Electride Li ₆ C by sp-Hybridized Cage States at Moderate Pressures. <i>Physical Review Letters</i> , 2021 , 127, 157002	7.4	1
359	A New Superconducting 3R-WS Phase at High Pressure. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 3321-3327	6.4	2
358	Unraveling electrochemical CO reduction of the single-atom transition metals supported on N-doped phosphorene. <i>Applied Surface Science</i> , 2021 , 545, 148953	6.7	2
357	Carbon and Oxygen Coordinating Atoms Adjust Transition Metal Single-Atom Catalysts Based On Boron Nitride Monolayers for Highly Efficient CO Electroreduction. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 18934-18943	9.5	2
356	Ultrafast Electron Transfer in Binary Nanoparticle Superlattices under High Pressure. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021 , 15, 2100066	2.5	0
355	Multistep Dissociation of Fluorine Molecules under Extreme Compression. <i>Physical Review Letters</i> , 2021 , 126, 225704	7.4	1
354	Aluminum solubility in bridgmanite up to 3000 K at the top lower mantle. <i>Geoscience Frontiers</i> , 2021 , 12, 929-935	6	
353	Novel Strongly Correlated Europium Superhydrides. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 32-40	6.4	11
352	Edge reconstructions of black phosphorene: a global search. <i>Nanoscale</i> , 2021 , 13, 4085-4091	7.7	4

351	Synthesis of molecular metallic barium superhydride: pseudocubic BaH. <i>Nature Communications</i> , 2021 , 12, 273	17.4	29
350	Wrinkle and near-resonance effects on the vibrational and electronic properties in compressed monolayer MoSe. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 11709-11716	3.6	2
349	First principle studies of ammonium chloride under high pressure.. <i>RSC Advances</i> , 2021 , 11, 5149-5155	3.7	
348	Stability of hydrogen-terminated graphene edges. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 13261-13266	3.3	3
347	Pressure-induced superconducting CSH with an HS framework. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 22779-22784	3.6	4
346	An electrically conductive and ferromagnetic nano-structure manganese mono-boride with high Vickers hardness. <i>Nanoscale</i> , 2021 , 13, 18570-18577	7.7	1
345	Pressure-Induced Superionicity of H in Hypervalent Sodium Silicon Hydrides. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 7166-7172	6.4	0
344	First-principles investigation of rhodium hydrides under high pressure. <i>Physical Review B</i> , 2021 , 104,	3.3	1
343	Pressure-Induced Transition from Spin to Superconducting States in Novel MnN. <i>ACS Omega</i> , 2021 , 6, 21830-21836	3.9	
342	Revealing the Unusual Boron-Pinned Layered Substructure in Superconducting Hard Molybdenum Semiboride. <i>ACS Omega</i> , 2021 , 6, 21436-21443	3.9	2
341	Superconducting ScH and LuH at Megabar Pressures. <i>Inorganic Chemistry</i> , 2021 , 60, 15330-15335	5.1	5
340	High-Temperature Superconducting Phases in Cerium Superhydride with a T_c up to 115K below a Pressure of 1Megabar. <i>Physical Review Letters</i> , 2021 , 127, 117001	7.4	19
339	Hardness, magnetic, elastic, and electronic properties of manganese semi-boride synthesized by high pressure and high temperature. <i>Journal of Solid State Chemistry</i> , 2021 , 302, 122386	3.3	1
338	A novel hard superconductor obtained in di-molybdenum carbide (Mo ₂ C) with MoO ₆ octahedral structure. <i>Journal of Alloys and Compounds</i> , 2021 , 881, 160631	5.7	0
337	High-temperature superconductivity in transition metallic hydrides MH (M = Mo, W, Nb, and Ta) under high pressure. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 6717-6724	3.6	6
336	Moderate Pressure Stabilized Pentazolate Cyclo-N Anion in Zn(N) Salt. <i>Inorganic Chemistry</i> , 2020 , 59, 8002-8012	5.1	15
335	Enhanced hardness in tungsten-substituted molybdenum diboride solid solutions by local symmetry reduction. <i>Materials Chemistry and Physics</i> , 2020 , 251, 123188	4.4	2
334	Strain engineering induced indirect-direct band gap transition of difluorophosphorane. <i>Solid State Communications</i> , 2020 , 311, 113873	1.6	

333	Photoluminescence in wide band gap corundum Mg ₄ Ta ₂ O ₉ single crystals. <i>Chinese Physics B</i> , 2020 , 29, 083301	1.2	
332	Lasing Behavior of a Single ZnO Nanowire Resonating in Fabry-Pérot Mode under Pressure. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 7523-7530	3.8	1
331	The Unexpected Stability of Hydrazine Molecules in Hydrous Environment under Pressure. <i>Chinese Physics Letters</i> , 2020 , 37, 016102	1.8	1
330	Pressure-induced metallization and reentrant insulativity in elemental crystal of phosphorus: a prediction by ab initio calculations. <i>New Journal of Physics</i> , 2020 , 22, 033011	2.9	1
329	Superconductivity of LaH ₁₀ and LaH ₁₆ polyhydrides. <i>Physical Review B</i> , 2020 , 101,	3.3	38
328	Superconducting praseodymium superhydrides. <i>Science Advances</i> , 2020 , 6, eaax6849	14.3	49
327	Stability and Solubility of the FeAlO ₃ Component in Bridgmanite at Uppermost Lower Mantle Conditions. <i>Journal of Geophysical Research: Solid Earth</i> , 2020 , 125, e2019JB018447	3.6	6
326	High-Pressure Synthesis of Magnetic Neodymium Polyhydrides. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2803-2811	16.4	28
325	Broadband Emission Enhancement Induced by Self-Trapped Excited States in One-Dimensional EAPbI ₃ Perovskite under Pressure. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 8984-8991	3.8	8
324	Formation mechanism of insensitive tellurium hexanitride with armchair-like cyclo-N ₆ anions. <i>Communications Chemistry</i> , 2020 , 3,	6.3	4
323	Velocity and Stability of Condensed Polymorphic SiH ₄ : A High-Temperature High-Pressure Brillouin Investigation. <i>Chinese Physics Letters</i> , 2020 , 37, 066201	1.8	0
322	Evolution of metallization and superconductivity in solid hydrogen. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020 , 384, 126571	2.3	3
321	Ab initio studies on ammonium iodine under high pressure. <i>Chinese Physics B</i> , 2020 , 29, 053104	1.2	2
320	Superconducting Zirconium Polyhydrides at Moderate Pressures. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 646-651	6.4	12
319	Pressure-stabilized polymerization of nitrogen in alkaline-earth-metal strontium nitrides. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 5242-5248	3.6	6
318	Strain-engineering enables reversible semiconductor-metal transition of skutterudite IrAs ₃ . <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 1108-1114	6.8	1
317	High-pressure Raman scattering and x-ray diffraction studies of MgTa ₂ O ₆ . <i>AIP Advances</i> , 2020 , 10, 065324	2.5	4
316	Hydrogen Pentagraphenelike Structure Stabilized by Hafnium: A High-Temperature Conventional Superconductor. <i>Physical Review Letters</i> , 2020 , 125, 217001	7.4	31

315	Synthesis and characterization of a strong ferromagnetic and high hardness intermetallic compound FeB. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 27425-27432	3.6	3
314	High-Tc state of lanthanum hydrides. <i>Physical Review B</i> , 2020 , 102,	3.3	3
313	Superconductivity and equation of state of lanthanum at megabar pressures. <i>Physical Review B</i> , 2020 , 102,	3.3	7
312	Pressure-Dependent Phonon Scattering of Layered GaSe Prepared by Mechanical Exfoliation. <i>Chinese Physics Letters</i> , 2020 , 37, 088201	1.8	1
311	Pressure and temperature-dependent optical properties of TiTaO ₂ . <i>RSC Advances</i> , 2020 , 10, 25379-25384	3.7	1
310	Pressure Generation above 35GPa in a Walker-Type Large-Volume Press. <i>Chinese Physics Letters</i> , 2020 , 37, 080701	1.8	3
309	Local Carbon Concentration Determines the Graphene Edge Structure. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3451-3457	6.4	10
308	A new (Mg _{0.5} Fe _{0.53+})(Si _{0.5} Al _{0.53+})O ₃ LiNbO ₃ -type phase synthesized at lower mantle conditions. <i>American Mineralogist</i> , 2019 , 104, 1213-1216	2.9	4
307	Single crystal growth and magnetic properties of Co-doped ZnNb ₂ O ₆ . <i>Modern Physics Letters B</i> , 2019 , 33, 1950274	1.6	1
306	Structural transitions in NaNH ₂ via recrystallization under high pressure. <i>Chinese Physics B</i> , 2019 , 28, 096402	1.2	4
305	Growth and properties of spinel structure ZnCoTiO single crystals by the optical floating zone method.. <i>RSC Advances</i> , 2019 , 9, 26436-26441	3.7	6
304	Unexpected calcium polyhydride CaH: A possible route to dissociation of hydrogen molecules. <i>Journal of Chemical Physics</i> , 2019 , 150, 044507	3.9	10
303	Revealing the Unusual Rigid Boron Chain Substructure in Hard and Superconductive Tantalum Monoboride. <i>Chemistry - A European Journal</i> , 2019 , 25, 5051-5057	4.8	7
302	Lasing-Mode Switch of a Hexagonal ZnO Pyramid Driven by Pressure within a Diamond Anvil Cell. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 610-616	6.4	8
301	High-Pressure Bonding Mechanism of Selenium Nitrides. <i>Inorganic Chemistry</i> , 2019 , 58, 2397-2402	5.1	9
300	The Raman scattering of trirutile structure MgTaO single crystals grown by the optical floating zone method.. <i>RSC Advances</i> , 2019 , 9, 839-843	3.7	5
299	Structural stability and vibrational characteristics of CaB ₆ under high pressure. <i>Chinese Physics B</i> , 2019 , 28, 068101	1.2	2
298	High-temperature superconductivity in sulfur hydride evidenced by alternating-current magnetic susceptibility. <i>National Science Review</i> , 2019 , 6, 713-718	10.8	32

297	Structural, Electronic, and Optical Properties of ZnO _{1-x} Te _x Alloys. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1900155	2.5	2
296	Modulating Band Gap of Boron Doping in Amorphous Carbon Nano-Film. <i>Materials</i> , 2019 , 12,	3.5	3
295	Crystal structures and decomposing of BB compounds under pressure. <i>Chinese Physics B</i> , 2019 , 28, 056104	1.2	2
294	Structural and electrical properties of GaTe systems under high pressure. <i>Chinese Physics B</i> , 2019 , 28, 056104	1.2	3
293	New Metallic Ordered Phase of Perovskite CsPbI ₃ under Pressure. <i>Advanced Science</i> , 2019 , 6, 1900399	13.6	33
292	Metallic and anti-metallic properties of strongly covalently bonded energetic AlN nitrides. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 12029-12035	3.6	8
291	Ab initio studies of copper hydrides under high pressure. <i>Frontiers of Physics</i> , 2019 , 14, 1	3.7	6
290	Superconductivity with high hardness in Mo ₃ C ₂ . <i>Inorganic Chemistry Frontiers</i> , 2019 , 6, 1282-1288	6.8	6
289	High-temperature superconductivity in ternary clathrate YCaH under high pressures. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 245404	1.8	10
288	Unique Phase Diagram and Superconductivity of Calcium Hydrides at High Pressures. <i>Inorganic Chemistry</i> , 2019 , 58, 2558-2564	5.1	12
287	Reexploration of Structural Changes in Element Bromine through Pressure-Induced Decomposition of Solid HBr*. <i>Chinese Physics Letters</i> , 2019 , 36, 086401	1.8	0
286	Polyhydride CeH with an atomic-like hydrogen clathrate structure. <i>Nature Communications</i> , 2019 , 10, 3461	17.4	44
285	Nitrogen-rich GaN ₅ and GaN ₆ as high energy density materials with modest synthesis condition. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019 , 383, 125859	2.3	7
284	Disorder-order structural transition of single crystal hydrogen chloride under high pressure-temperature. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 17655-17661	3.6	
283	Metallization: New Metallic Ordered Phase of Perovskite CsPbI ₃ under Pressure (Adv. Sci. 14/2019). <i>Advanced Science</i> , 2019 , 6, 1970083	13.6	2
282	Variational and diffusion Monte Carlo simulations of a hydrogen molecular ion in a spherical box. <i>Chinese Physics B</i> , 2019 , 28, 056401	1.2	1
281	Structural model of substitutional sulfur in diamond. <i>Chinese Physics B</i> , 2019 , 28, 088102	1.2	2
280	Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in MnB. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 2697-2705	3.6	13

279	Temperature-Dependent Lasing of CsPbI Triangular Pyramid. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 7056-7061	6.4	8
278	Ternary superconducting cophosphorus hydrides stabilized via lithium. <i>Npj Computational Materials</i> , 2019 , 5,	10.9	13
277	Role of TM-TM Connection Induced by Opposite d-Electron States on the Hardness of Transition-Metal (TM = Cr, W) Mononitrides. <i>Inorganic Chemistry</i> , 2019 , 58, 15573-15579	5.1	5
276	Ultraviolet nanolaser of inverted hexagonal ZnO pyramid resonating in helical whispering-gallery-like mode. <i>Optics Express</i> , 2019 , 27, 34454-34462	3.3	2
275	First principle studies of ZnO _{1-x} S _x alloys under high pressure. <i>Journal of Alloys and Compounds</i> , 2019 , 788, 905-911	5.7	5
274	High-Pressure Behavior of Nano-Pt in Hydrogen Environment*. <i>Chinese Physics Letters</i> , 2019 , 36, 106101	1.8	2
273	Structure and superconductivity of protactinium hydrides under high pressure. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 315403	1.8	4
272	Comparative Study of Substitutional N and Substitutional P in Diamond. <i>Chinese Physics Letters</i> , 2019 , 36, 116101	1.8	1
271	Optical Behaviors of a Microsized Single-Crystal MAPbI ₃ Plate under High Pressure. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 30221-30227	3.8	7
270	Optical phonon behavior and magnetism of columbite Zn _{0.8} Co _{0.2} Nb ₂ O ₆ . <i>Chinese Physics B</i> , 2019 , 28, 128104	1.2	
269	Complete ligand reinforcing the structure of cubic-CrN. <i>Journal of Alloys and Compounds</i> , 2019 , 783, 232-236	2.7	2
268	Investigation the origin and mechanical properties of unusual rigid diamond-like net analogues in manganese tetraboride. <i>International Journal of Refractory Metals and Hard Materials</i> , 2019 , 85, 104845	4.1	3
267	Ab Initio Approach and Its Impact on Superconductivity. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019 , 32, 53-60	1.5	16
266	Pressure-Induced Reversible Phase Transitions in a New Metastable Phase of Vanadium Dioxide. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 955-962	3.8	3
265	Modulating Hardness in Molybdenum Monoborides by Adjusting an Array of Boron Zigzag Chains. <i>Chemistry of Materials</i> , 2019 , 31, 200-206	9.6	14
264	The hardness mechanism and bonding properties of CrN ₂ : A first principle study. <i>Computational Materials Science</i> , 2019 , 158, 282-288	3.2	2
263	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed MoSe ₂ /WSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 5820-5828	3.8	13
262	Revealing unusual rigid diamond net analogues in superhard titanium carbides.. <i>RSC Advances</i> , 2018 , 8, 14479-14487	3.7	4

261	Increasing Interlayer Coupling Prevented the Deformation in Compressed Multilayer WSe ₂ . <i>Journal of Physical Chemistry C</i> , 2018 , 122, 10261-10266	3.8	1
260	High pressure structural stability of the Na-Te system. <i>AIP Advances</i> , 2018 , 8, 035123	1.5	
259	Effect of Surface Trap States on Photocatalytic Activity of Semiconductor Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9312-9319	3.8	13
258	New Ordered Structure of Amorphous Carbon Clusters Induced by Fullerene-Cubane Reactions. <i>Advanced Materials</i> , 2018 , 30, e1706916	24	14
257	High-pressure dissociation of selenium and tellurium. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 6116-6120	3.6	3
256	Emergent property of high hardness for C-rich ruthenium carbides: partial covalent Ru-Ru bonds. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 6108-6115	3.6	3
255	Unravelling decomposition products of phosphine under high pressure. <i>Journal of Raman Spectroscopy</i> , 2018 , 49, 721-727	2.3	6
254	High-Pressure Formation of Cobalt Polyhydrides: A First-Principle Study. <i>Inorganic Chemistry</i> , 2018 , 57, 181-186	5.1	19
253	Effect of electrons scattered by optical phonons on superconductivity in MH ₃ (M=S, Ti, V, Se). <i>Physical Review B</i> , 2018 , 98,	3.3	11
252	Function of large-volume high-pressure apparatus at SECUF. <i>Chinese Physics B</i> , 2018 , 27, 076103	1.2	1
251	Insights into Antibonding Induced Energy Density Enhancement and Exotic Electronic Properties for Germanium Nitrides at Modest Pressures. <i>Inorganic Chemistry</i> , 2018 , 57, 10416-10423	5.1	2
250	Pressure-induced superconducting ternary hydride H ₃ SXe: A theoretical investigation. <i>Frontiers of Physics</i> , 2018 , 13, 1	3.7	16
249	New Phase of Ca(BH ₄) ₂ at Near Ambient Conditions. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 14272-14276	3.7	3
248	Pressure-Dependent Strong Photoluminescence of Excitons Bound to Defects in WS ₂ Quantum Dots. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800305	4.6	3
247	First-principles study of ternary Li-Al-Te compounds under high pressure. <i>Solid State Communications</i> , 2018 , 270, 58-64	1.6	3
246	Green-solvent-processed hybrid solar cells based on donor-acceptor conjugated polyelectrolyte.. <i>RSC Advances</i> , 2018 , 8, 38591-38597	3.7	1
245	Chloride treatment for highly efficient aqueous-processed CdTe nanocrystal-based hybrid solar cells. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 11156-11161	7.1	2
244	Elastic properties of single crystal hydrogen sulfide: A Brillouin scattering study under high pressure-temperature. <i>Journal of Applied Physics</i> , 2018 , 124, 125901	2.5	2

243	Elastic stability of CO ₂ phase I under high temperature and pressure. <i>Physical Review B</i> , 2018 , 98,	3.3	1
242	Stable structures and superconductivity of an At-H system at high pressure. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 24783-24789	3.6	1
241	High energetic polymeric nitrogen sheet confined in a graphene matrix.. <i>RSC Advances</i> , 2018 , 8, 30912-30918	3.9	9
240	Ordered Amorphous Carbon: New Ordered Structure of Amorphous Carbon Clusters Induced by Fullerene-Tubane Reactions (Adv. Mater. 22/2018). <i>Advanced Materials</i> , 2018 , 30, 1870156	2.4	
239	High-pressure structures of helium and carbon dioxide from first-principles calculations. <i>Solid State Communications</i> , 2018 , 283, 9-13	1.6	2
238	Structure and superconductivity of hydrides at high pressures. <i>National Science Review</i> , 2017 , 4, 121-135	10.8	65
237	First-principle studies on the LiTe system. <i>Materials Research Express</i> , 2017 , 4, 015701	1.7	
236	A Novel High-Density Phase and Amorphization of Nitrogen-Rich 1H-Tetrazole (CHN) under High Pressure. <i>Scientific Reports</i> , 2017 , 7, 39249	4.9	10
235	Excellent mechanical properties of metastable c-WN fabricated at high pressure and high temperature. <i>International Journal of Refractory Metals and Hard Materials</i> , 2017 , 66, 63-67	4.1	14
234	A first-principles investigation of a new hard multi-layered MnB ₂ structure. <i>RSC Advances</i> , 2017 , 7, 10559-10563	3.7	7
233	Correlatively Dependent Lattice and Electronic Structural Evolutions in Compressed Monolayer Tungsten Disulfide. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 941-947	6.4	9
232	Confirmation of the Structural Phase Transitions in XeF ₂ under High Pressure. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 6264-6271	3.8	13
231	Raman and IR spectroscopic characterization of molybdenum disulfide under quasi-hydrostatic and non-hydrostatic conditions. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600798	1.3	6
230	Alkaline-earth metal (Mg) polynitrides at high pressure as possible high-energy materials. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 9246-9252	3.6	43
229	Pressure-Induced Photoluminescence Adjustment and Lattice Disorder in Monolayer WSe ₂ . <i>ChemNanoMat</i> , 2017 , 3, 238-244	3.5	6
228	A Novel Polymerization of Nitrogen in Beryllium Tetranitride at High Pressure. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9766-9772	3.8	38
227	Bonding Properties of Aluminum Nitride at High Pressure. <i>Inorganic Chemistry</i> , 2017 , 56, 7494-7500	5.1	22
226	In situ determination of mechanical properties for poly(ether ether ketone) film under extreme conditions. <i>RSC Advances</i> , 2017 , 7, 8670-8676	3.7	8

225	Raman study of graphene nanoribbon analogs confined in single-walled carbon nanotubes and their high-pressure transformations. <i>Journal of Raman Spectroscopy</i> , 2017 , 48, 951-957	2.3	4
224	A Facile Method to Control the Diameter of Monoclinic Vanadium Dioxide Rods. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 2791-795	1.3	
223	Nanotwinned diamond synthesized from multicore carbon onion. <i>Carbon</i> , 2017 , 120, 405-410	10.4	22
222	Manganese mono-boride, an inexpensive room temperature ferromagnetic hard material. <i>Scientific Reports</i> , 2017 , 7, 43759	4.9	33
221	Pressure-Stabilized Superconductive Ionic Tantalum Hydrides. <i>Inorganic Chemistry</i> , 2017 , 56, 3901-3908	5.1	30
220	High pressure infrared spectroscopy study on C ₆₀ *CS ₂ solvates. <i>Chemical Physics Letters</i> , 2017 , 669, 49-53	2.5	5
219	Stability of Sulfur Nitrides: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 1515-1520	3.8	22
218	Divergent synthesis routes and superconductivity of ternary hydride MgSiH ₆ at high pressure. <i>Physical Review B</i> , 2017 , 96,	3.3	32
217	Structural stability and electronic property in K ₂ S under pressure. <i>RSC Advances</i> , 2017 , 7, 7424-7430	3.7	8
216	Investigation of superconductivity in compressed vanadium hydrides. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 26280-26284	3.6	7
215	Prediction of superconducting ternary hydride MgGeH: from divergent high-pressure formation routes. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27406-27412	3.6	26
214	Unexpected stable stoichiometries and superconductivity of potassium-rich sulfides. <i>RSC Advances</i> , 2017 , 7, 44884-44889	3.7	1
213	Temperature-dependent optical phonon behaviour of a spinel Zn ₂ TiO ₄ single crystal grown by the optical floating zone method in argon atmosphere. <i>RSC Advances</i> , 2017 , 7, 35477-35481	3.7	5
212	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3556-3563	6.4	28
211	Optical properties and structural phase transitions of W-doped VO ₂ (R) under pressure. <i>RSC Advances</i> , 2017 , 7, 31597-31602	3.7	3
210	Linear Tunability of the Band Gap and Two-Dimensional (2D) to Three-Dimensional (3D) Isostructural Transition in WSe ₂ under High Pressure. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 26019-26026	3.8	8
209	Crystal structures and electronic properties of solid fluorine under high pressure. <i>Chinese Physics B</i> , 2017 , 26, 076103	1.2	14
208	Superhard three-dimensional carbon with metallic conductivity. <i>Carbon</i> , 2017 , 123, 311-317	10.4	45

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